

APPLICATION GUIDE

Delivering a variety of efficient networking applications



Hotels & **Resorts**

Comprehensive networking equipment to satisfy customer comfort and management efficiency

PLANET hotels and resorts application provides a comprehensive collection of products to satisfy the comfort and security of guests and at the same time makes operation and management efficient. A wide range of devices including management switch, IP-PBX, IP phone, wireless AP controller, indoor and outdoor APs, SIP broadcasting system and SIP door intercom are reliable to ensure high-quality data, voice and power communications for the whole hospitality industry.

Vehicle 4G LTE Cellular Wireless Gateway VCG-1500WG-LTE

- One SIM slot and one 4G LTE antenna for network connection
- Supports Wi-Fi 802.11 b/g/n for mobile client connectivity
- GPS antenna allows to detect the location via sat nav system
- Supports CMS for remote management Supports GRE, PPTP, IPSec and L2TP

1200Mbps 802.11ac Wave 2 MU-MIMO Dual Band In-Wall Wireless AP

WDAP-W1200E

Network nfrastructures

Wireless

Surveillance

Communications

Voice

- 3 x 10/100/1000BASE-TX ports, with one 802.3at PoE/PD port supported
- In-wall design with 1 x RJ11 port Supported
- 802.1Q VLAN mapping multiple SSIDs
- AP/Gateway, Repeater, WDS(PtP), WDS(PtMP), WDS(Repeater) mode
- Centrally managed by PLANET AP Controller Series (NMS Series, WS Series, VR-300 & IVR-300 Series)

H.265 1080p Smart IR Dome IP Camera with Artificial Intelligence ICA-A4280

- 1/2.8" 2 Megapixel progressive scan STARVIS™ CMOS
- Face Recognition & 5 Deep Artificial Intelligence
- H.265(+)/H.264(+)/JPEG/AVI/MJPEG triple-stream encoding
- WDR, 3DNR, ICR, 2-way audio, microSD, PLANET DDNS & Easy DDNS
- PoE & ONVIF compliant for interoperability • Built-in smart IR illuminators, effective up to
- 25 meters • IP67-rated housing for rigorous environment

High Definition Color PoE IP Phone **VIP-1120PT**

- 2.4-inch color LCD monitor
- 2-line key with color LED
- 2 SIP identities
- Wideband G.722 HD audio
- IEEE 802.3at/af PoE compliant
- QoS, TR069, auto-provisioning and multi-language



L3 24-Port 802.3bt PoE + 4-Port 10G LCD Switch GS-5220-24UPL4XVR

- 24-Port 10/100/1000T 802.3bt PoE++
- 2.4-inch color LCD touch screen with management functions • ERPS ring data recovery time <10ms
- Supports PoE power up to 95 watts (Total budget: 600W)
- 36-60V DC and 100-240V AC redundant power for system

1200Mbps 802.11ac Wave 2 MU-MIMO Dual Band Ceiling-mount Wireless Access Point WDAP-C7210E

- 11ac Wi-Fi up to 1200Mbps Wave 2 MU-MIMO
- Simultaneous dual-band connectivity in 2.4GHz 300Mbps and 5GHz 867Mbps
- Backward compatible with IEEE 802.11 a/b/g/n/ac
- Gigabit Ethernet Port with 802.3at PoE PD compliant
- Supports multiple VLANs mapping to multiple SSIDs
- SNMP-based central management and PLANET Smart Discovery supported

H.265 1080p Smart IR Bullet IP Camera with Artificial Intelligence ICA-A3280

- 1/2.8" 2 Megapixel progressive scan STARVIS™ CMOS
- Face Recognition & 5 Deep Artificial Intelligence
- H.265(+)/H.264(+)/JPEG/AVI/MJPEG triple-stream encoding • WDR, 3DNR, ICR, 2-way audio, microSD, PLANET DDNS &
- Easy DDNS PoE & ONVIF compliant for interoperability
- Built-in smart IR illuminators, effective up
- to 25 meters
- IP67-rated housing with cable management bracket

IP65 720p SIP Door Intercom w/RFID HDP-5240PT

- 720p HD camera with viewing angle: 110°, 95°
- Wideband G.722 HD audio
- Trouble-free installation
- IP65 for eaves environment
- -20 to 60 degrees C operating temperature
- Unlock the door with an RFID, remote DTMF or local password

Universal Network Management Controller with

- Stylish TFT-LCD touch screen display and aluminum die-cast front bezel and chassis
- Auto discovery of up to 1024 devices via web interface
- Central provisioning and remotely control over each managed device
- A topology view of network devices by LLDP protocol
- All-new dashboard for monitoring traffic and PoE usage
- Setup Wizard, alert popup message and e-mail alarm notification

LCD Touch Screen (10"/12")

NMS-1000V-10/12



H.265 25-ch 4K Network Video Recorder NVR-2500

- H.265/H.264 and dual streaming compression technology
- Up to 4K resolution recording and playback for clear monitoring
- PVMS and smart event for detailed monitoring
- Multiple browsers and languages supported
- Remote live viewing through Smart App for 24/7 viewing
- 2 SATA HDD drawer (3.5") and 4K HD/VGA output



7-inch Indoor Touch Screen PoE Video Intercom **VTS-700P**

- Stylish 7-inch touch screen IP intercom
- Power over Ethernet IEEE 802.3af/at
- Hands-free two-way video Intercom; unlock door from the intercom
- Up to 3 scenes managed via PLANET Z-Wave Plus[™] Gateway
- 8-zone alarm interface available for security control (DI x 6 + DO x 2)
- Standard SIP compatible with most modern IP Intercom systems
- · Real-time image monitoring of home and community public cameras









OPENET



Digital Campus

Efficient management and extension of campus network capacity, mobility and security

As technology advances rapidly these of campus IoT structure.

L3 24-Port 802.3bt PoE + 4-Port 10G LCD Switch GS-5220-24UPL4XV

• 24-Port 10/100/1000T 802.3bt PoE++

Network Infrastructures

Wireless

Surveillance

- 2.4-inch color LCD touch screen with management functions
- ERPS ring data recovery time <10ms • Supports PoE power up to 95 watts (Total budget: 600W)



1200Mbps 802.11ac Wave 2 MU-MIMO Dual Band Ceiling-mount Wireless Access Point **WDAP-C7210E**

- 11ac Wi-Fi up to 1200Mbps Wave 2 MU-MIMO
- Simultaneous dual-band connectivity in 2.4GHz 300Mbps and 5GHz 867Mbps
- Backward compatible with IEEE 802.11 a/b/g/n/ac
- Gigabit Ethernet Port with 802.3at PoE PD compliant
- Supports multiple VLANs mapping to multiple SSIDs
- SNMP-based central management and PLANET Smart Discovery supported

H.265 5 Mega-pixel Smart IR Bullet IP Camera with Remote Focus and Zoom

ICA-M3580P

- 1/2.8" 5 Megapixel progressive scan STARVIS™ CMOS
- 2.7-13.5mm 5X motorized zoom auto focus lens
- H.265(+)/H.264(+)/JPEG/AVI/MJPEG triple-stream encoding
- WDR, 3DNR, ICR, PLANET DDNS & Easy DDNS
- PoE & ONVIF compliant for interoperability
- Built-in smart IR illuminators, effective up to 40 meters
- IP67-rated housing with cable management bracket

High Definition Touch Color Screen Smart Media Android SIP Conference Phone

ICF-1900

- 7-inch color touch screen with Android 9.0 OS
- Plug and Play optional 1080p USB camera with 720P 30fps H.264 video call
- IETE SIP compliant with Transport Layer Security
- Up to 20 SIP lines with 112 one-touch DSS keys
- Dual Gigabit and IEEE 802.3af/at PoE compliant
- Built-in Bluetooth 4.2 and 2.4G/5G Wi-Fi
- Wideband G.722 HD and Opus audio codec with handset and hands-free function



Layer 3 12-port 10G SFP+ Fiber Switch XGS-6350-12X8TR

• 1G/10G SFP+ port x 12

- 10/100/1000BASE-T port x 8
- Dual 100~240V AC redundant power



1200Mbps 802.11ac Wave 2 MU-MIMO Dual Band Outdoor AP

WDAP-850AC

- Simultaneous 2.4GHz (Wi-Fi access) and 5GHz (backhaul) wireless network
- Gigabit wire and Wave 2 1200Mbps wireless connectivity (dual-band)
- 4 built-in N-type (F) antenna connectors
- 802.1Q VLAN mapping multiple SSIDs Ground terminal design
- 802.3at Power over Ethernet
- Centrally managed by PLANET AP Controller Series (NMS Series, WS Series, VR-300 & IVR-300 Series)

24-port 1000X+4-10G Stack Switch SGS-6341-16S8C4XR

- 10/1000BASE-X SFP port x 24
- 10/100/1000BASE-T port x 8 shared with Port-21 to Port-24
- 10GBASE-X SFP+ port x 4
- 100~240V AC and 36-72V DC redundant power system
- Smart fan design for silent operation



Enterprise-class Universal Network Management Controller

NMS-500

- Auto discovery of up to 512 devices via web interface
- Central provisioning and remotely controls over each managed device
- A topology view of network devices by LLDP protocol
- SMTP alarm and syslog for managed devices in real-time status
- Smart AP Controller up to 512 APs
- Easy deployment with map positioning
- Dashboard and chart design for all information in one



Media Converter Chassis/10G Converter

- Hot-swappable Feature on each Slot
- FT-80x/FT-90x/GT-80x/GT-90x compatible
- AC/DC Hot-swappable Redundant Power

SIP IP Phone w/Color Screen **VIP-2140PT**

- 2.8-inch main color LCD monitor
- 2.4-inch (DSS) key-mapping LCD monitor
- 4 identities/accounts with color LED
- 30 configurable and 6 multicolored LED keys
- Wideband G.722 HD audio with handset and hands-free features
- Dual 10/100/1000 Gigabit Ethernet



HDP-5260PT • 720p camera has high-performance HD video G.722 coding produces clearer HD voice quality IP65 and IK10 enclosure

and RFID card

 Supports the most popular and compatible standard SIP protocol

720p SIP Multi-unit Apartment Vandalproof

• Supports video intercom, door phone and single device paging

Door Phone with RFID and PoE

Access control by IP phone, DTMF code

MC-1500R/XT-705A • 10/19-inch Rack mountable







Smart Buildings for Enterprises & More

Facilitating smart networking system with PLANET enterprise application

To make a network of smart buildings a reality, PLANET enterprise applications provide closely controlled security within your networking system, and at the same time, they make the digital network design efficient and cost-effective. PLANET provides data centers of office buildings, banks, etc. with specially-designed color touch LCD Ethernet switches, large-scale wireless LAN controllers, network video recorders and security gateways. By utilizing our latest Network Management System (UNI-NMS,) demands for fast and safe digital transmission through the IP deployments including VoIP system, IP surveillance and wireless LAN can be centrally managed and easily controlled to ensure optimal capability and performance.

Universal Network Management System UNI-NMS

Detect a maximum of 100 000 nodes

Control Center

Nork Space

Center

Data

- Up to 200 sites, 200 floor maps, 500 nodes per area
- Easy to keep track of the status of each device
- Display of the topology of network devices • Any fault found can be made known
- Real-time signal coverage of APs

1200Mbps 802.11ac Wave 2 MU-MIMO Dual Band Ceiling-mount Wireless Access Point WDAP-C7210E

- 11ac Wi-Fi up to 1200Mbps Wave 2 MU-MIMO
- Simultaneous dual-band connectivity in 2.4GHz 300Mbps and 5GHz 867Mbps
- Backward compatible with IEEE 802.11 a/b/g/n/ac
- Gigabit Ethernet Port with 802.3at PoE PD compliant
- Supports multiple VLANs mapping to multiple SSIDs
- SNMP-based central management and PLANET Smart Discovery supported

H.265 1080p Smart IR Bullet IP Camera ICA-3280/ICA-4280

- HDTV video quality up to 1080p
- H.265/H.264/JPEG/MJPEG compression
- WDR, 3DNR, ICR, PLANET DDNS & Easy DDNS
- PoE & ONVIF compliant for interoperability
- Built-in smart IR illuminators, effective up to 25 meters

Layer 3 Chassis Routing Switch XGS3-42000R

- 160-port 10/100/1000BASE-T copper
- 156 1000BASE-SX/LX SFP fiber slots
- 60 10G XFP fiber slots
- 6 40G QSFP+ fiber slots
- 19-inch, 6U rack-mount

VPN Security Gateway VR-300

- Dual-WAN failover and Dual-WAN load balancing
- SSL VPN and robust hybrid VPN (IPSec/SSL/L2TP over IPSec)
- Stateful Packet Inspection (SPI) firewall and content filtering
- Blocking DoS/DDOS attack, port range forwarding,
- PLANET DDNS, IPv6, SNMP, Wireless AP management
- Compliant with IEEE 802.11a/b/g/n/ac wireless technology
- IP30 metal case, DIN-rail and wall-mount designs
- PLANET Universal Network Management System

High Definition Touch Color Screen Smart Media Android SIP Conference Phone

ICF-1900

- 7-inch color touch screen with Android 9.0 OS
- Plug and Play optional 1080p USB camera with 720P 30fps H.264 video call
- IETE SIP compliant with Transport Layer Security
- Up to 20 SIP lines with 112 one-touch DSS keys
- Dual Gigabit and IEEE 802.3af/at PoE compliant
- Built-in Bluetooth 4.2 and 2.4G/5G Wi-Fi
- Wideband G.722 HD and Opus audio codec with handset and hands-free function

1200Mbps 802.11ac Wave 2 MU-MIMO Dual Band In-Wall Wireless AP

Meeting Room

WDAP-W1200E

- 3 x 10/100/1000BASE-TX ports, with one 802.3at PoE/PD port supported
- In-wall design with 1 x RJ11 port Supported
- 802.1Q VLAN mapping multiple SSIDs
- AP/Gateway, Repeater, WDS(PtP), WDS(PtMP), WDS(Repeater) mode
- Centrally managed by PLANET AP Controller Series (NMS Series, WS Series, VR-300 & IVR-300 Series)

SIP IP Phone w/Color Screen **VIP-2140PT**

- 2.8-inch main color LCD monitor
- 2.4-inch (DSS) key-mapping LCD monitor
- 4 identities/accounts with color LED
- 30 configurable and 6 multicolored LED keys
- Wideband G.722 HD audio with handset and hands-free speaker
- Dual 10/100/1000 Gigabit Ethernet



IPX-2200

JRINE

- 60 concurrent calls and up to 200 registers
- 36 concurrent calls and up to 40 conference rooms • Recording/Voicemail up to 1,500 hours
- 2 slots for maximum 8 ports for FXO/GSM
- 10/100/1000 Gigabit Ethernet



24-port PoE + 4-port 10G LCD Switch GS-5220-24PL4XV

- 10/100/1000BASE-T with 802.3at PoE+ port x 24
- R model supports 100~240V AC/48~60V DC redundant power
- 1G/10G SFP+ port x 4
- 600-watt PoE budget
- Up to 36 watts per PoE port



Enterprise-class Universal Network Management Controller **NMS-500**

- Auto discovery of up to 512 devices via web interface
- Central provisioning and remotely controls over each managed device
- A topology view of network devices by LLDP protocol
- SMTP alarm and syslog for managed devices in real-time status
- Smart AP Controller up to 512 APs
- · Easy deployment with map positioning
- Dashboard and chart design for all information in one















Factory Automation

Designed for reliable, secure and smart industrial network Infrastructures

PLANET factory automation application is one of its many Industrial Ethernet Solutions that provide highlyreliable and smart solutions to ensure continuous and efficient operation for the IIoT environment. The Industrial Ethernet upgrades traditional, proprietary factory floor networks to a low-cost, high-performance, and scalable architecture. PLANET provides a complete product portfolio that is compliant with major IE protocols such as Modbus TCP, EtherCAT, and EN50155 for information level, control level, and device level in the Industrial Ethernet network.

Flat-type 4-port PoE LCD Router WGR-500-4PV

- 2.4-inch color LCD touch screen with management functions
- 4-port 10/100/1000BASE-T with 802.3at PoE+
- 802.1Q VLAN and IGMP proxy
- PoE management IPv6 Support for IoT Networking
- Secure Firewall Protection



Industrial 4-port PoE ++ Switch IGS-5225-4UP1T2S

- 4-port 10/100/1000BASE-T with 802.3bt/802.3at PoE
- 1-port 10/100/1000BASE-T
- 2-port 100/1000BASE-X SFP

M2M Station

- IPv6/IPv4 Web, Telnet and SNMP management
- 802.1Q VLAN, MSTP and IGMP snooping
- ERPS ring supported Static route supported
- -40 to 75 degrees C wide operating
- temperature • DI and DO supported

Universal Network Management Controller with LCD Touch Screen (10"/12")

NMS-1000V-10/12

- Stylish TFT-LCD touch screen display and aluminum die-cast front bezel and chassis
- Auto discovery of up to 1024 devices via web interface
- Central provisioning and remotely control over each managed device
- · A topology view of network devices by LLDP protocol All-new dashboard for monitoring traffic and PoE usage
- Setup Wizard, alert popup message and e-mail alarm notification

H.265 25-ch 4K Network Video Recorder with 16-Port PoE

NVR-2516P

Storage/Warehouse

- H.265/H.264 and dual streaming compression technology
- Up to 4K resolution recording and playback for clear monitoring
- 16 independent PoE+ network interfaces
- PVMS and smart event for detailed monitoring
- Remote live viewing through Smart App for 24/7 viewing • 1 eSATA, 4 SATA HDD drawer (3.5") and 4K HD/VGA output



Industrial 4-port RS232/ RS422/ RS485 Media Converter ICS-2400T

- 4 RS232/422/485 port to 10/100BASE-TX IP30 metal case protection
- -40 to 75 degrees C operating temperature
- TCP Server/Client, UDP Client, Virtual COM, Telnet
- Server, Pair Connection Remote/Local Modes
- 12 to 48V DC, redundant power with polarity reverse protect function

Industrial 1-port RS232/422/485 Modbus Gateway IMG-2100T

- 1-port 10/100BASE-TX
- 1 RS232 with DB9 interface
- 1 RS422 or RS485 with terminal block interface
- RTU Master, RTU Slave, ASCII Master, and ASCII Slave operation modes

- Built-in IP-based Web interface and telnet interface for remote management
- 9 to 48V DC / 24V AC, redundant power
- -40 to 75 degrees C operating temperature
- IP30 metal case

16-ch EtherCAT Slave I/O Module IECS-1116-DI

- Built-in isolated 16 digital inputs
- 2 x RJ45 bus interface

Production Line

- LED indicators for the input status
- Removable terminal block connector
- Distance between stations up to 100m (100BASE-TX) EtherCAT conformance test tool

verified

Industrial 16-port PoE Switch **IGS-20160HPT**

- 16-port 10/100/1000T with PoE+
- plus 2-port 10/100/1000T + 2-port 1G/2.5G SFP IPv6/IPv4 Web, Telnet and SNMP management
- 802.1Q VLAN, MSTP and IGMP snooping
- ERPS ring supported
- Static route supported
- -40 to 75 degrees C wide operating • DI and DO supported

temperature



1200Mbps 802.11ac Wave 2 MU-MIMO Dual Band Ceiling-mount Wireless Access Point **WDAP-C7210E**

- 11ac Wi-Fi up to 1200Mbps Wave 2 MU-MIMO
- Simultaneous dual-band connectivity in 2.4GHz 300Mbps and 5GHz 867Mbps
- Backward compatible with IEEE 802.11 a/b/g/n/ac
- Gigabit Ethernet Port with 802.3at PoE PD compliant
- Supports multiple VLANs mapping to multiple SSIDs
- SNMP-based central management and PLANET Smart Discovery supported

2 Mega-pixel IR PoE Plus Speed Dome IP Camera with Extended Support ICA-E6260

- Built-in microSD card slot for on-board storage
- 33x optical zooming, endless pan and tilt
- Maximum of 60fps at 1080p
- Weatherproof (IP67), vandalproof (IK09)
- Superior low light sensitivity
- WDR enhancement, 3D noise reduction • Built-in PTZ auto tracking and enhanced
- intelligent video application



16-ch EtherCAT Slave I/O Module IECS-1116-DO

- Built-in isolated 16 digital outputs
- 2 x RJ45 bus interface
- LED indicators for the input status
- Removable terminal block connector
- Distance between stations up to 100m (100BASE-TX)
- · EtherCAT conformance test tool verified



H.265 5 Mega-pixel Smart IR Dome IP Camera with Remote Focus and Zoom ICA-M4580P

- 1/2.8" 5 Megapixel progressive scan STARVIS™ CMOS
- 2.7-13.5mm 5X motorized zoom auto focus lens
- H.265(+)/H.264(+)/JPEG/AVI/MJPEG triple-stream encoding
- WDR, 3DNR, ICR, PLANET DDNS & Easy DDNS
- PoE & ONVIF compliant for interoperability
- Built-in smart IR illuminators, effective up to 30 meters
- IP67-rated housing for rigorous environment



M2M Station

Storage/Warehouse

















Universal Network Management Controller with LCD Touch Screen (10"/12")



2 Mega-pixel PoE Plus Speed Dome IP Camera with Extended Support ICA-E6260



H.265 25-ch 4K Network Video Recorder with 16-Port PoE NVR-2516P



Industrial 16-port PoE IGS-20160HPT



16-ch EtherCAT Slave I/ O Module IECS-1116-DO



16-ch EtherCAT Slave I/O Module IECS-1116-DI



H.265 5 Mega-pixel Smart IR Dome IP Camera with Switch Remote Focus and Zoom ICA-M4580P

Filling

Industrial 4-port PoE ++ Industrial 4-port Serial Server IGS-5225-4UP1T2S ICS-2400T

Industrial 1-port RS232/422/485 Modbus Gateway IMG-2100T

Flat-type 4-port PoE LCD Router WGR-500-4PV



NMS-1000V-10/12





Production Line









Metro System

Intelligent Transportation System

Innovative transportation network with comprehensive **IP** solutions

PLANET covers a wide range of Intelligent Transportation System (ITS) applications for the railway, metro system and highway networking deployments. As all of these ITS network interfaces require long distance, high-bandwidth and realtime data transmission. PLANET's comprehensive product line provides robust, reliable and secure solutions to ensure uninterrupted high-quality transmission. Featuring ITU-T under G.8032 Recommendation, it provides sub-50ms protection and recovery switching for Ethernet traffic in a ring topology and at the same time ensures that there are no loops formed at the Ethernet layer.



Highway

2 Mega-pixel PoE Plus Speed Dome IP Camera with Extended Support

Industrial Flat-type PoE Switch

- 2.4-inch color LCD touch screen with management
- 8-port 10/100/1000BASE-T with 802.3at PoE+
- 2-port 1G/2.5G SFP
- 802.1Q VLAN, MSTP and IGMP Snooping
- ERPS ring and IEEE 1588 supported





- Auto discovery of up to 512 devices via web interface
 - Central provisioning and remotely control over each managed device A topology view of network devices by LLDP protocol
 - The status of a network can be reported via system event and syslog



- WDR enhancement , 3D noise reduction Built-in microSD card slot for on-board storage





H.265 5 Mega-pixel Smart IR Dome IP Camera with Remote Focus and Zoom ICA-M4580P

4-port PoE + 2-port TP Switch

IGS-5226-4P2T

EN50155 4G LTE/GPS/Wi-Fi Gateway VCG-1500WG-LTE

Industrial 4G LTE/GPS Gateway ICG-2510WG-LTE

Bus

Industrial Flat-type PoE Switch WGS-5225-8P2SV

Control Center

Electric Box

8-port LRP Managed

Switch

LRP-822CS

Platform/On the Train





PLANET Technology Corporation

11F., No. 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C)Tel: 886-2-2219-9518Fax: 886-2-2219-9528E-mail: sales@planet.com.tw

PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners. © PLANET Technology Corporation DM-AP0121